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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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67813 7590 03/21/2011 BRINKS HOFER GILSON & LIONE/SanDisk P.O. BOX 10395 CHICAGO, IL 60610				
EXAMINER				
TINKLER, MURIEL S				
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3691				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/089,188

**Applicant(s)**

MORAN ET AL.

**Examiner**

MURIEL TINKLER

**Art Unit**

3691

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1.4.6-17 and 51-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1.4.6-17 and 51-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-940)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/17/2010
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This application has been reviewed. The status of the claims are as follows: claims 1-17 were previously pending; claims 2, 3 and 5 have been cancelled; claim 1 has been amended; claims 51-54 have been added; therefore, claims 1, 4, 6-17 and 51-54 are currently pending and have been examined. The rejections are as follows.

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 17, 2010 has been entered.

#### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 4 and 6-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are not patent eligible because they cover more than one category of statutory subject matter. In this case, claims 4 and 6-17 are dependent 'system' claims. Claims 6 and 6-17 depend from claim 1. However, claim 1 is a 'device' (or product) claim. Systems and devices are

two different categories of statutory subject matter. Therefore, dependent claims 4 and 6-17 are rejected.

***Claim Rejections - 35 USC § 112***

First paragraph

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 53 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 53 states, "wherein the access control module is distinct from a removable storage device comprising the flash memory", the Examiner asserts that this does not comply with the specification of this application. It drawings discloses the access control device (element 46, of figure 4) as separate from the electronic data storage device (element 48). In this embodiment, it is important to note that the components rely upon the management and control of the host computational device such that any attempts to access data in data storage device must pass through access control device (see the specification mailed on July 2, 2002 page 16, lines 15-28). The Examiner asserts that it is improper for claim 53, to be dependent on claim 54, which clearly discloses a flash memory device that is "independent of the host". For purposes

of compact prosecution, the Examiner will interpret this claim as having an access control module connected to a removable storage device.

Second paragraph

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 4 and 6-17 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claims 4 and 6-17 each recites the limitation "The storage system" in line 1. There is insufficient antecedent basis for this limitation in the claim. There is insufficient antecedent basis because independent claim 1 is a device, not a system. For purposes of compact prosecution, the Examiner will interpret "The storage system" in claims 4 and 6-17 to be "The removable storage device".

6. Claim 53 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. The Applicant states in lines 1-2, of claim 53 that "the access control module is distinct from a removable storage device". It is unclear why this claim states that the data storage device and the access control device are separate, when they are inextricably connected and you cannot access one without the other (see the specification of this application, mailed on July 2, 2002 page 16, lines 15-28). For

purposes of compact prosecution, the Examiner will interpret this limitation as an access control module connected to a data storage device.

### ***Response to Arguments***

10. Applicant's arguments, see page 7, filed June 17, 2010, with respect to the rejection(s) of claim(s) 1, 4 and 6-17 under 35 USC 103 have been fully considered and are persuasive.

11. Applicant's arguments filed June 17, 2010 have been fully considered but they are not persuasive. The Applicant argues, on pages 6-7 that the combination of Gullman, Helland, and Pare fail to each the following elements: "biometric interface for receiving, independently of the host device, a request to access the flash memory at the removable storage device" and the "processor for managing access to the flash memory, independently of the host device, based on a comparison of the request to the at least one permission, the comparison being independent, requiring no management by an operating system of the host device, such that if the at least one permission includes a particular access type that matches the access requested in the request, the processor provides such access to the flash memory, and alternatively if the at least one permission does not include a particular access type that matches the access requested in the request, the processor denies such access to the flash.

12. More specifically the Applicant argues, on page 7, that Gullman does not teach a removable storage device comprising a biometric interface for receiving, independently

of the host device, a request to access a flash memory at the removable storage device. The Examiner disagrees. Gullman discloses this in two distinct embodiments. See column 2, lines 27-39, which discloses an embodiment of the invention where the biometric security mechanism stores a template of user biometric information. In this embodiment, the biometric device generates a token to the user, who in turn accesses the host device using the token. However, this particular embodiment does not explicitly state that the biometric device is separate from the host device (it also does not disclose that it is directly connected). In a different embodiment disclosed in column 2, lines 47-65, Gullman states that the biometric device is an integrated circuit card including a processing unit, memory and a biometric sensor. Finally, the Examiner has used *Helland* in the Office Action mailed on March 17, 2010 with regard to the use of flash memory.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claim 1-9, 12, 14-17 and 51-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gullman et al. (US 5,280,527) in view of Helland et al. (US 6,014,666), hereafter referred to as Gullman and Helland.

16. Regarding claims 1 and 51 and 52, Gullman discloses:

- a. A method and device for controlling access to a resource, access being provided through a host device, the device (see Abstract)
- b. an input for receiving a request to access the resource (figure 1 #14—biometric security sensor); and,
- c. a processor for executing said at least one instruction and for comparing said request to said at least one permission, such that if said at least one permission includes a type of access requested in said request, access to the resource is provided, and alternatively if said at least one permission does not include a type of access requested in said request, access to the resource is not provided (see figure 2 #22—processor and column 2, lines 27-65);
- d. a biometric interface (see figure 1, element 14 "sensor"; figure 2, element 18; and figure 2, element 18).



- e. determining permission of the user, via a biometric security apparatus (figure 1, element 14), and stored memory (figure 2, element 22), without any type of management from an operating system of the host device (see column 2, lines 20-65; and, column 5, line 57 through column 6, line 29).
  - f. Denying access, see column 2 (lines 37-55)
17. Gullman does not disclose a USB and a USB interface controller for communicating with the USB bus of the host device and, if permitted, for transmitting data from said processor; a flash memory device for storing at least one permission for determining access to the resource; and, a flash memory controller for controlling said flash memory device. Helland discloses these things in column 5 (line 55) through column 6 (line 5) and column 6 (lines 13-27). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Gullman to include the use of flash memory and universal serial bus because both flash and universal serial bus were well known in the art as storage and connectivity options at the time the invention was made.
18. Regarding claim 4, Gullman discloses: The storage system of claim 1, wherein said biometric detection device further comprises: a sample collector for collecting said biological parameter of the user (see column 3 (lines 36-55)).
19. Regarding claim 6, Gullman discloses: The storage system of claim 4, wherein said biological parameter of the user is a fingerprint of the user (see column 3 (lines 36-55)).

20. Regarding claim 7, Gullman discloses: The storage system of claim 1, further comprising: (f) a RAM component for storing data for performing said at least one instruction of said data processor (see figure 2 #33).
21. Regarding claim 8, Gullman discloses: The storage system of claim 1, further comprising: (f) a cryptographic chip for encrypting and decrypting data (see figure 3).
22. Regarding claim 9, Gullman discloses: The storage system of claim 8, wherein said cryptographic chip performs an authentication process (see column 4 (line 50) through column 5 (line 14) and column 5 (lines 34-39)).
23. Regarding claim 12, Gullman discloses: The storage system of claim 8, wherein said cryptographic chip performs encryption immediately upon receiving a command from said data processor (real-time, see column 4 (line 50) through column 5 (line 14)).
24. Regarding claims 14 and 15, Gullman discloses: The storage system of claim 8, wherein said cryptographic chip further comprises a cryptographic chip memory for storing at least one cryptographic key and at least one cryptographic instruction for encrypting and decrypting data, such that said cryptographic chip forms a removable encryption engine; wherein said encrypted data is stored on said cryptographic chip memory (see figure 2 #33).
25. Regarding claims 17, Gullman discloses: the storage system of claim 15, wherein said cryptographic chip memory is said flash memory device (see the rejection of claim 1 above).
26. Regarding claim 16, The Examiner argues that it would be obvious make something separate that is currently combined (see the rejection of claim 17 above).

27. Regarding claim 53, which states, “wherein the access control module is distinct from a removable storage device comprising the flash memory”. However, based on the reasoning above, the Examiner will interpret this claim as an access control device connected to a removable storage device. Gullman discloses this in the Abstract and column 2 (lines 21-27).

28. Regarding claim 54, Gullman discloses:

- a. An access control device configured to communicate with a host device, the access control device comprising: a biometric interface (see Abstract, figure 1, element 14 “sensor”; figure 2, element 18; and figure 2, element 18)
- b. for receiving, independent of the host system, a request at the access control device to access a flash memory (figure 1 #14—biometric security sensor); and
- c. a processor for managing access to the flash memory independent of the host device based on a comparison of the request to at least one permission, the comparison being independent of, and requiring no management by an operating system of the host device, such that if the at least one permission includes a particular access type that matches the access requested in the request, the processor provides such access to the flash memory (figure 1, element 14), (figure 2, element 22), see column 2, lines 20-65; and, column 5, line 57 through column 6, line 29), and

d. alternatively if the at least one permission does not include a particular access type that matches the access requested in the request, the processor denies such access to the flash memory, see column 2 (lines 37-55).

29. Gullman does not disclose a USB and a USB interface controller for communicating with the USB bus of the host device and, if permitted, for transmitting data from said processor; a flash memory device for storing at least one permission for determining access to the resource; and, a flash memory controller for controlling said flash memory device. Helland discloses these things in column 5 (line 55) through column 6 (line 5) and column 6 (lines 13-27). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Gullman to include the use of flash memory and universal serial bus because both flash and universal serial bus were well known in the art as storage and connectivity options at the time the invention was made.

**30. Claims 10, 11 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Gullman and Helland as applied to claims 8 and 12 above, and further in view of Pare et al. (US 5,805,719), hereafter referred to as Pare.**

31. Regarding claims 10 and 11, Gullman and Helland disclose the information in claim 8. Gullman and Helland do not disclose that said cryptographic chip emulates a smart card and stores encrypted smart card data. Pare discloses this in column 2 (line 24) through column 3 (line 14). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Gullman and

Helland to include the use of a smart card and encrypted smart card data because it is a current was an increasing trend in the banking industry at the time of this invention and it provides an efficient way to store information.

32. Regarding claim 13, Gullman and Helland disclose the information in claim 12. Gullman and Helland do not disclose that said cryptographic chip creates a cryptographic signature with a hash immediately upon receiving a command from said data processor. Pare discloses the use of a hash algorithm in column 62 (line 62) through column 63 (line 10). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Gullman and Helland to include a hash algorithm because it provides further security for data that may travel through an un-secure network.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MURIEL TINKLER whose telephone number is (571)272-7976. The examiner can normally be reached on Monday through Friday from 8:30 AM until 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on (571)272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Muriel Tinkler/  
Examiner, Art Unit 3691